

Application No.: 10/757244

Docket No. 34650-00249USC1

**AMENDMENTS TO THE CLAIMS**

Claims 1-27 (canceled)

28. (previously presented) An electronic device supporting both battery identification and communication of data over an interface between a battery and the electronic device, comprising:

a resistor having a resistance value;

a processor configured to calculate a resistance in the battery responsive to the resistance value and a voltage drop across the resistor; and

circuitry for enabling communication of data between the processor and the battery.

29. (currently amended) The electronic device of Claim 28 wherein the circuitry for enabling ~~communications~~ communication of data, comprises:

a transceiver for transmitting and receiving serial ~~communications~~ communication of data between the electronic device and the communications circuitry of the battery;

a first register for holding data to be transmitted by the transceiver; and

a second register for holding data received by the transceiver.

30. (previously presented) A method enabling both battery identification and communication of data over an interface between a battery and an electronic device, comprising the steps of:

attempting to communicate data to the battery from the electronic device via a serial connection responsive to a connection between the battery and the electronic device;

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selectively switching a resistor in the electronic device between system voltage and a communications pin if the electronic device may not communicate data to the battery; and

determining a first resistance value in the battery responsive to the impedance in the electronic device.

31. (currently amended) An electronic device supporting both battery identification and communication of data over an interface between a battery and the electronic device, comprising:

a current source providing a current value;

a processor configured to calculate a resistance in the battery responsive to the current value and a voltage drop value at an input to the electronic device; and

circuitry for enabling communication of data between the processor and the battery.

32. (currently amended) The electronic device of Claim 31 wherein the circuitry for enabling ~~communications~~ communication of data, comprises:

a transceiver for transmitting and receiving serial communications of data between the electronic device and the communications circuitry of the battery;

a first register for holding data to be transmitted by the transceiver; and

a second register for holding data received by the transceiver.

33. (canceled)

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34. (new) The method of claim 30, further including the step of attempting to communicate with the battery from the electronic device prior to the step of selectively switching.